

Date: Wednesday, 1/24/2007 4:40:11 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID
Job Number : 30413	
Estimate Number : 10552	
P.O. Number : N/A	Part Number : D206642312G
This Issue : 1/24/2007 S.O. No. : N/A	Drawing Number : N/A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LANDING GEAR	Drawing Revision : N/A
Previous Run : 29744	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 2/14/2007 Qty: 1 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est Rev: 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM/EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-312 CHG004

KS 07.01.25 ①

2.0	30413A	206 L HIGH GEAR SKIDTUBE
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Comment: Sub-Component 206L/407 LOW, 407 HIGH GEAR SKIDTUBE

D206-642-341 B 3-413A

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Pick Packing Kit

PC 7/62/13 ①

4.0	D2652	Bushing
-----	-------	---------



Comment: Qty.: 24.0000 Each(s)/Unit Total: 24.0000 Each(s)

BUSHING

Pick:

Qty	Part Number	Description	Batch
24	D2652	Bushing	<u>B28933-</u>
1	D206-642-341(REF)		<u>B3-413A</u>

5.0	D2655	Ring
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description	Batch
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:12 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

1

D2655

Tow Ring

B28928 - ✓

6.0

D2659

Lug Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

LUG ASSEMBLY

Pick:

Qty Part Number

Description

Batch

2 D2659

Lug Assembly

B28928 - ✓

7.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

SET SCREW

Pick:

Qty Part Number

Description

Batch

10 D2712

Set Screw

B26481 - ✓

8.0

D29322

206 Saddle Right side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty Part Number

Description

Batch

1 D2932-2

Saddle

B30465 - ✓

GREY

9.0

D29332

206 Saddle Right



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty Part Number

Description

Batch

1 D2933-2

Saddle

B30467 - ✓

GREY

10.0

D2934

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty Part Number

Description

Batch

2 D2934

Saddle Spacer

B28920 - ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: 206L/L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D2935

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty	Part Number	Description
2	D2935	Saddle Spacer

Batch

B28921- ✓

12.0

D29382

206 Saddle Right side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description
1	D2938-2	Saddle

Batch

B30481- ✓

GREY

13.0

D29392

206 Saddle Right Side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description
1	D2939-2	Saddle

Batch

B30483- ✓

GREY

14.0

D2968043

Tow Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description
1	D2968-043	Tow Ring

Batch

B29353 - ✓

15.0

AN337A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description
4	AN3-37A	Bolt

Batch

M14478 - ✓

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: 206L/L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

AN341A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
8	AN3-41A	Bolt	M101931 -

17.0

AN45A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
1	AN4-5A	Bolt	M100857 - ✓

18.0

AN46A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
12	AN4-6A	Bolt	M102909 - ✓

19.0

AN510A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
4	AN5-10A	Bolt	M102083 -

20.0

AN511A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
8	AN5-11A	Bolt	M101291 -

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

AN512A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty Part Number

Description

Batch

4

AN5-12A

Bolt

M102380

22.0

AN960JD10

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

WASHER

Pick:

Qty Part Number

Description

Batch

12

AN960JD10

Washer

M100279

23.0

AN960JD1016

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty Part Number

Description

Batch

1

AN960JD1016

Washer

M10515

24.0

AN960JD416

Washer



Comment: Qty.: 25.0000 Each(s)/Unit Total : 25.0000 Each(s)

WASHER

Pick:

Qty Part Number

Description

Batch

25

AN960JD416

Washer

M101938

25.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

WASHER

Pick:

Qty Part Number

Description

Batch

8

AN960JD516

Washer

M102929 ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L/L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

AN9704

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description
1	AN970-4	Washer

Batch

M 102929 -

27.0

MS21042L3

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

NUT

Pick:

Qty	Part Number	Description
12	MS21042L3	Nut

Batch

M102212 -

28.0

MS21042L4

Nut



Comment: Qty.: 13.0000 Each(s)/Unit Total : 13.0000 Each(s)

NUT

Pick:

Qty	Part Number	Description
13	MS21042L4	Nut

Batch

M19185 -

29.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT KITS 100% FOR COMPLETENESS

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1


Identify and pack for shipping as per PPP D206-642-312

Location:

PPP Rev: D

C 7/02/13 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 07/02/13

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:13 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 30413

Part Number: D206642312G

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

①
2/5/07/02/13

Job Completion



U 07.02.13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

GREY

Dart Aerospace Ltd.

Date: Wednesday, 1/24/2007 4:40:49 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206 L HIGH GEAR SKIDTUBE
 Job Number : 30413A
 Estimate Number : 10539
 P.O. Number : *N/A* Part Number : D206642341 *6*
 This Issue : 1/24/2007 S.O. No. : *WIN* Drawing Number : D2650 REV E
 Prsht Rev. : NC Project Number : N/A
 First Issue : *WIN* Type : LANDING GEAR Drawing Revision : E
 Previous Run : 29950A Material : *N/A*
 Written By : *[Signature]* Due Date : 2/14/2007 Qty: 1 Um: Each
 Checked & Approved By : *[Signature]* LATEST
 Comment : Est Rev: H 03.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-341 CHG002 *W/A*

2.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2620

Bent Tube 3" OD

B229388 BE 07-01-26

3.0

D2647

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2647

Fwd Cap

B224842 BE 07-01-26

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

BE 07-01-26

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

BE 07-01-26

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

BE 07-01-26

A/R

Aluminum Rod

M101010 / M102756

4-Grind weld flush to cap on top surface only.

BE 07-01-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:49 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A, & B). Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

DP
7-1-27

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

DP 2-1-27

6.0

D26545

206 L Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2654-5

Web

B28855

DP 7-1-27

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: 7-1-27 Time: 1 PM

Finish Date: ~~7-2-27~~ 7-1-29 Time: 8:00 AM

A/R Sikaflex-291 M102672

Sikaflex expiry date: 7-2-1

DP
7-1-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 07-01-29

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 19.0000 Each(s)/Unit Total: 19.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

19 D2649

Crossbolt spacer

B22329

BE 07-01-29

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod *M101010 BE 07-01-29*

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

M10101-30(1)

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

M10101-30(1)

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2680-041

Nut Plate

B24203

M10101-30(1)

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 CCR264SS3-3

Rivets

M18548

M10101-30(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 M7885/3-4-3

Rivets

M 19099 Pm 07-01-30 (1)

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Pm 07-01-30 (1)



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

15.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/01/06

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/01/06

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(1)

Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

m-r / yl

07/02/07

18.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

→ Powder Coat GREY (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

a.m 07/02/07

(1)

19.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

yl

07/02/08 x 1

20.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad

29226

yl

07/02/08 x 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Date: Wednesday, 1/24/2007 4:40:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

D265611

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-11

Wearshoe 21095

22.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe 24846

23.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-35

Wearshoe 28253

24.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad B29201

25.0

ALS41032130

Insert



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 ALS4-1032-130

Inserts m102475

or (see QSI 017)

FR/4/ 07/02/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

AN960JD10L

Washer



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number Description Batch

54 AN960JD10L Washer m102217

27.0

MS27039108

Screw



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number Description Batch

54 MS27039-1-08 Screw m101537

28.0

D26511

Plug



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number Description Batch

14 D2651-1 Plugs B29330

29.0

D26513

O-Ring



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number Description Batch

14 D2651-3 O-Rings m29778

30.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN960JD416 Washer B11151

FR/ Y 07/02/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw

B6874

32.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap

B28041

33.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer

M102217

34.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw

M101537

FL/YL

07/02/08

35.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

M102672

Sikaflex expiry date:

02/07

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

FL/YL
07/02/08

(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/24/13

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/24/2007 4:40:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 30413A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291

Sikaflex expiry date:

m102672

02/07

FL/YL 07/02/08 (1)

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: m103004

FL/YL 07/02/08 (1)

36.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

207-02-12 (1)

37.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

207-02-12 (1)

38.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

PPP 25713 07/02/08

39.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(1)
07/02/13

Job Completion



h 07-02-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>UP</i>	DRAWN BY <i>UP</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES	SCALE NTS
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED
16 04 17 *PH*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET


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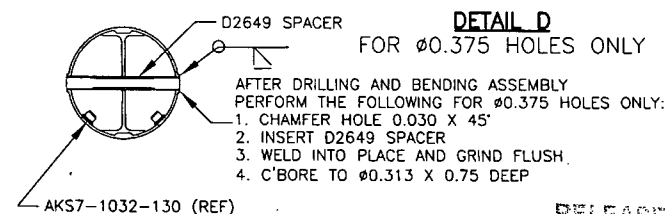
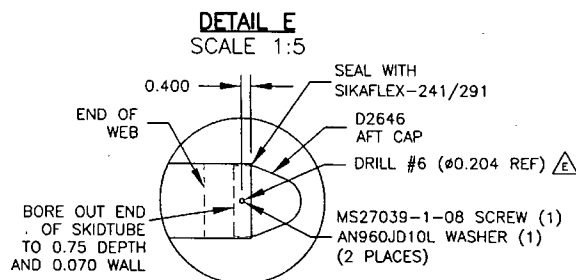
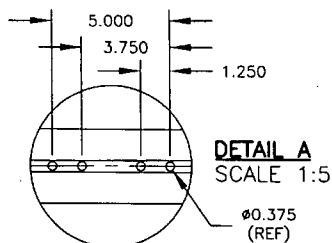
- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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WORK ORDER
NO. 30413A

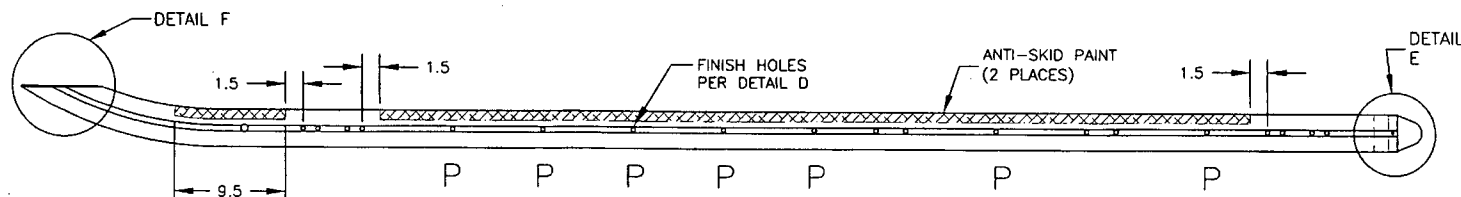
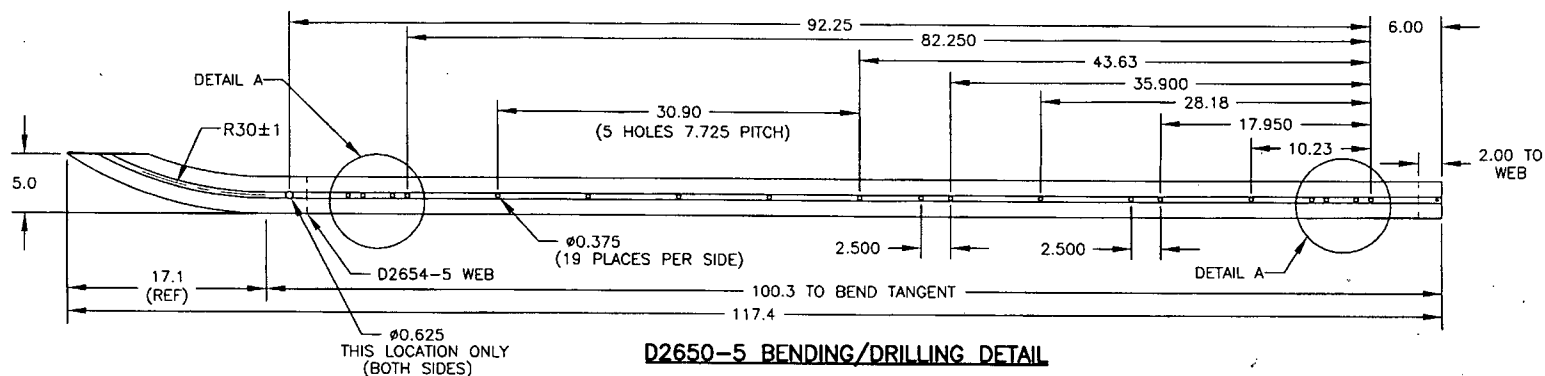
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	CHECKED	APPROVED		DRAWING NO.	REV. E
	DATE	TITLE			SCALE
	P4	H	D2650	SHEET 2 OF 5	
	06.03.30		SKIDTUBE	1:10	



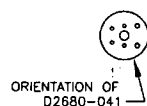
RELEASED
04.17.11



DETAIL F (NOT TO SCALE)

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

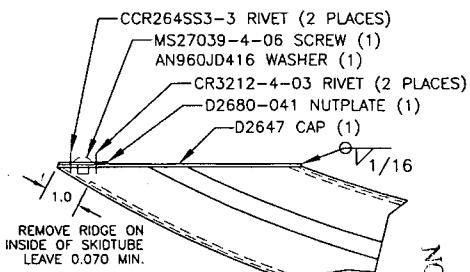
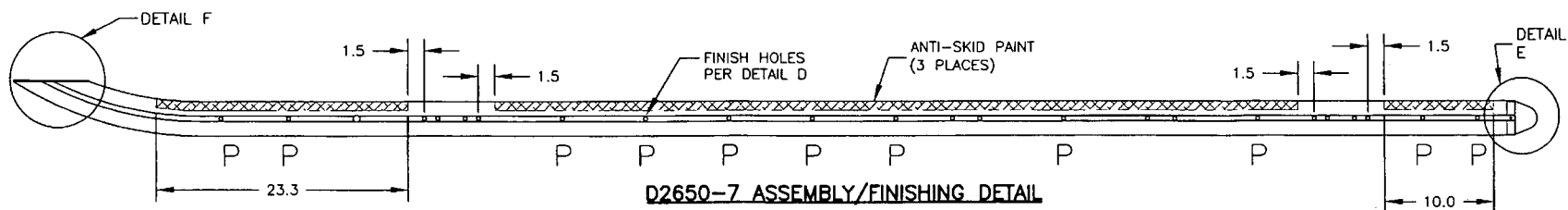
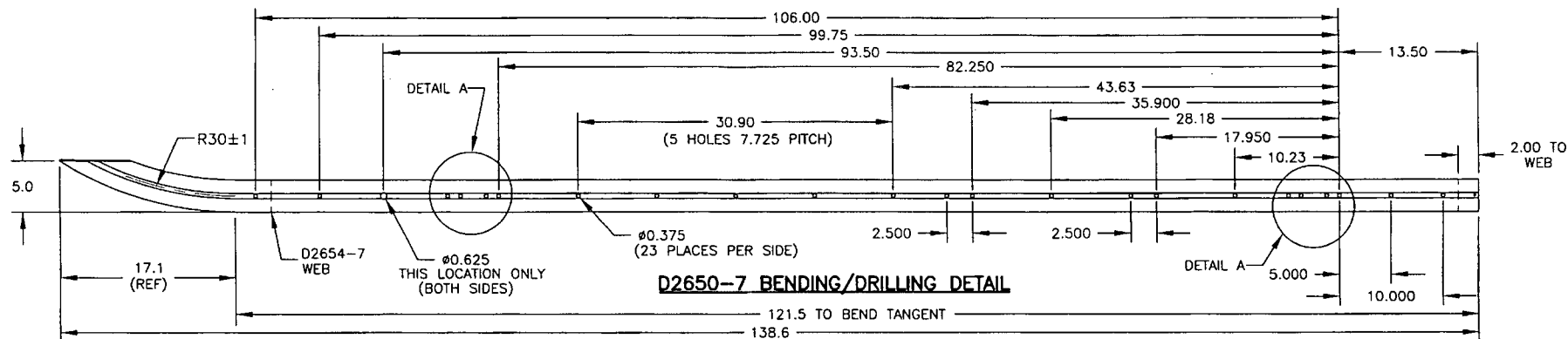
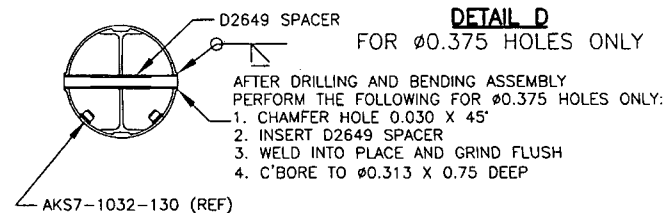
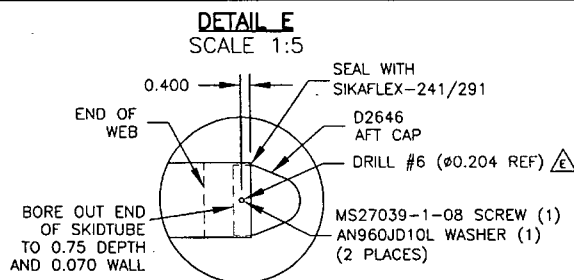
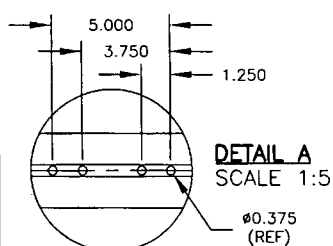


REMOVE RIDGE ON INSIDE OF SKIDTUBE LEAVE 0.070 MIN.

- CCR264SS3-3 RIVET (2 PLACES)
- MS27039-4-06 SCREW (1)
- AN960JD416 WASHER (1)
- CR3212-4-03 RIVET (2 PLACES)
- D2680-041 NUTPLATE (1)
- D2647 CAP (1)

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WORK ORDER
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CHECKED	PH	APPROVED		DRAWING NO.	REV. E
DATE	06.03.30			D2650	SHEET 4 OF 5
				TITLE	SCALE
				SKIDTUBE	1:10



DETAIL F (NOT TO SCALE)

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

NO. 304134
WORK ORDER
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DESIGN	UP	DRAWN BY	UP	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	PH	APPROVED	PH	DRAWING NO. D2650
DATE	06.03.30	TITLE	SKIDTUBE	REV. E SHEET 5 OF 5 SCALE 1:10

RELEASED
0.04.17

NO. 92

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number D206642 241 / B29442 A

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/01/29 Qualifier David David

Jason Murdoch

From: Bill Beckett [bbeckett@dartaero.com]
Sent: Monday, February 05, 2007 1:10 PM
To: 'Jason Murdoch'
Cc: 'L Lacelle'
Subject: RE: sikaflex-291

Jason,
Yes.
Bill

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: February 5, 2007 12:49 PM
To: 'Bill Beckett'
Subject: sikaflex-291

Bill,
We have 25 tubes of sikaflex-291, batch M102672, that expires at 02/2007. Is it acceptable to use the remainder until the end of this month?

jmurdoch@dartaero.com
Q.C. COORDINATOR